GTE

GTE Service Corporation
1850 M Street, N.W., Suite 1200
Washington, DC 20036
202 463-5200

Charon J. Harris
Director – Policy Matters

RECEIVED
OCT 30 1996
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

October 30, 1996

The Honorable Rachelle B. Chong, Commissioner
Federal Communications Commission
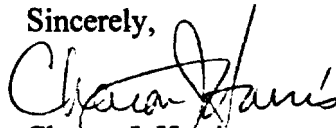1919 M Street, N.W. Room 844
Washington, D.C. 20554

EX PARTE: Federal-State Joint Board on Universal Service
CC Docket No. 96-45

Dear Commissioner Chong:

        In response to your request in our meeting yesterday, GTE provides the attached
estimates of the cost of deploying and operating a computer infrastructure in the nation's
public schools. As depicted in the attachment, the cost of providing inside wire
connections to every classroom in the nation would escalate the size of the Universal
Service Fund by as much as $6-12 billion.   Even without inside wire connections and
linkages within schools, a 1995 study by the United States Advisory Council on the
National Information Infrastructure estimates the cost of connecting shcools at between
$770 million and $1.88 billion for initial deployment, with an additional $600-980
million per year for annual operating expenses.

        Please let me know if you have any questions regarding this matter.

                        Sincerely,

                        Charon J. Harris

Attachment
cc: William F. Caton, Acting Secretary
        Federal State Joint Board Commissioners and Staff
        D. Gonzales
        T. Dale
        J. Morabito

No. of Copies rec'd____
List ABCDE

A part of GTE Corporation

FUNDS TO SCHOOLS
Implementing the Snowe-Rockefeller-Exxon-Kerry Amendment

► Requirement
Section 254(h) of the Telecommunications Act of 1996 requires the provision of telecommunications services at rates that are deemed affordable to schools, libraries and health care providers. The Act also calls for a specific, predictable and sufficient fund to reimburse carriers. The Act does not specify a mechanism for implementation.

► Recommended Plan
To meet the requirements of sufficient and predictable, the industry initially recommended a "funds to schools" approach that would provide vouchers to schools that could be used to obtain free services from any telecommunications service provider. Recommended establishing fund of about $1 billion a year from which vouchers are distributed, and would place constraint on amount of free services that schools may obtain at about $10,000-12,000 per year (125,000 schools at $10K equals $1.25 billion annual fund). Schools in rural and low income areas would receive additional funding above $10K limit to ensure equity and prevent situation of "haves and have nots." Concern is that without some constraints (i.e., if schools could obtain free services and there are no limits on the services they can obtain), cost to be borne by consumers could far exceed $1 billion per year, and industry could not accurately predict a fund level that would be sufficient and predictable.

Because of concerns expressed by education community with voucher plan, the industry has proposed an alternative plan based on a sliding discount. Under that plan, services would be offered at 30-70% discounts with a ceiling on benefits of $12,000 per school per year, and discounts halved to 15-35% on additional services up to $25,000. Discounts would not apply for services beyond $25,000 except in extreme cases. To ensure rates are affordable for schools in rural and high cost areas where tariff rates may be very high, discounts would apply to benchmark prices in lieu of actual rates, and LECs could receive reimbursement based on the difference between tariff rates and the benchmark price. To ensure that benefits accrue to those schools not yet connected to the information infrastructure, rather than to schools that can afford and have already been connected, the sliding discount would be phased in over five years for *existing* services (the full discount, with a ceiling on the benefits to be received, would apply to all new services).

► Eligible Services
Flexibility is important. Rules should not mandate deployment of specific technology or services. Specifying a particular technology or services might conflict with what schools already have, or with existing state plans. Schools are at different stages of technology deployment and have different needs, and therefor should be able to choose from any commercially available regulated services.

► Inside Wiring
Question of whether FCC has jurisdictional authority to require LECs to wire classrooms, since inside wire is not a regulated telecommunications service. As a practical matter, few LECs are any longer involved in the inside wire business. Cost of providing connections to every classroom would greatly escalate size of Universal Service Fund (about 125,000 eligible schools times industry estimate of $50,000-100,000 per school equals $6-12 billion just to wire classrooms).

► Use of TELRIC in Determining USF Reimbursement
Inappropriate and probably unlawful to use imputed costs (i.e., benchmark cost model) to determine basis for reimbursement from Universal Service Fund. Difference between tariff rate and rate for schools should be basis for reimbursement. Any shortfall in recovery (i.e., if fund is not "sufficient and predictable") might fall upon states. Also, use of TELRIC as basis for reimbusement would create administrative nightmare, with all providers having to perform cost studies and file tariffs for services in every jurisdiction in order to be competitively neutral.

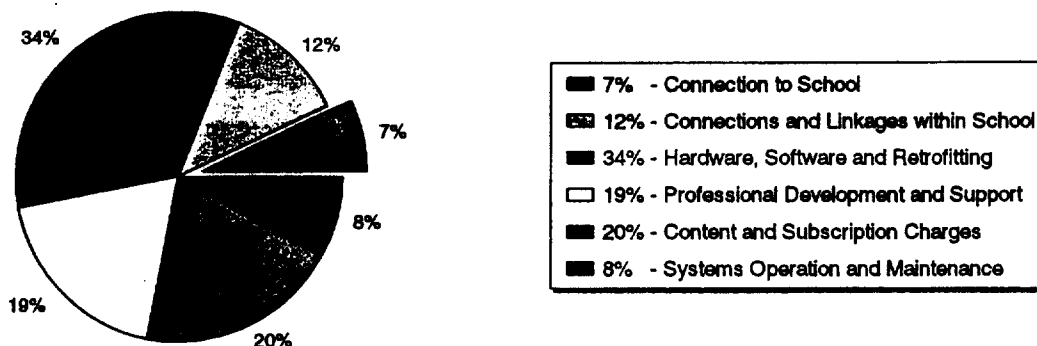### ► Libraries and Rural Health Care Providers
Have similar needs and require similar plans to schools. Approximately 15,000 libraries in nation; estimate they would increase necessary fund size about 10% over what is required for schools. No estimates available for health care providers.
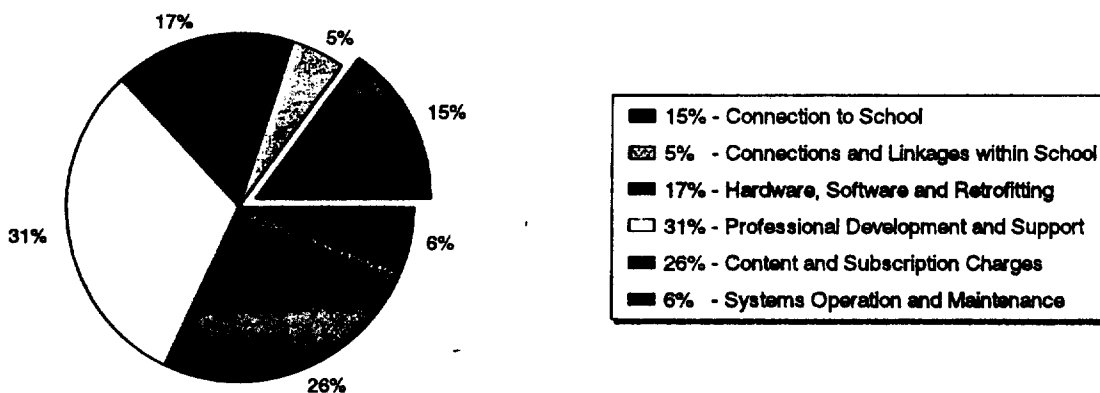
► KickStart Initiative
The attached pages show the estimated cost of deploying and operating a computer infrastructure in the nation's public schools under two different scenarios. A study performed in 1995 by the United States Advisory Council on the National Information Infrastructure shows that connecting schools to the public switched network is but one of many costs of equipping schools with computer technology. Depending on the "model" chosen for technology deployment, the cost of connecting schools would be between $770 million and $1.88 billion for initial deployment, and $600-980 million a year for annual operating costs, *not* including connections and linkages (i.e., inside wiring) within the school.

Cost of Deploying and Operating Computer Infrastructure
K-12 Public Schools - "Laboratory Model"

Initial Deployment Costs - $11 Billion

- 7% - Connection to School
- 12% - Connections and Linkages within School
- 34% - Hardware, Software and Retrofitting
- 19% - Professional Development and Support
- 20% - Content and Subscription Charges
- 8% - Systems Operation and Maintenance

Annual Operating Costs - $4 Billion

- 15% - Connection to School
- 5% - Connections and Linkages within School
- 17% - Hardware, Software and Retrofitting
- 31% - Professional Development and Support
- 26% - Content and Subscription Charges
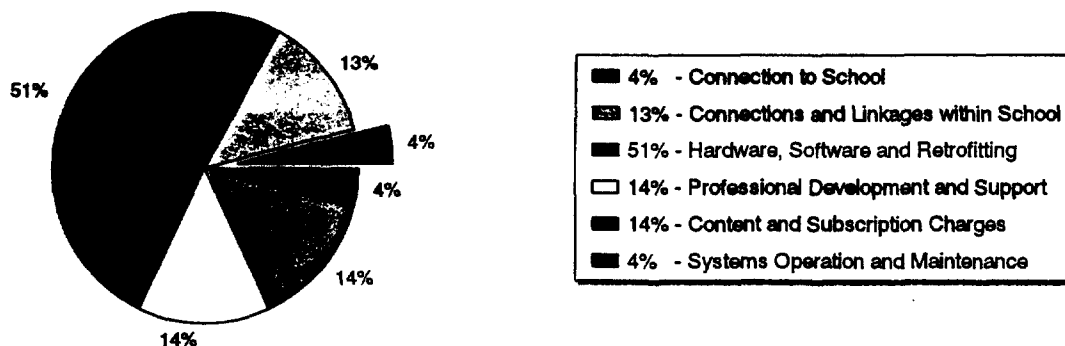- 6% - Systems Operation and Maintenance

Single laboratory room in each school with 25 computers; ethernet LAN in laboratory; 10 telephone lines. Deployment accomplished over 5 years.
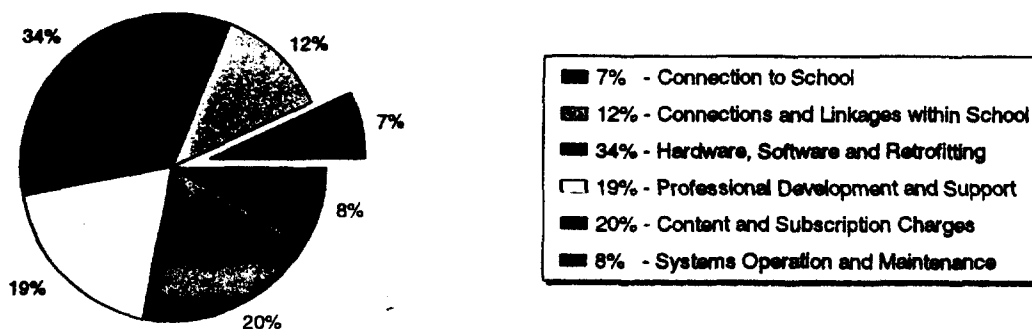
Cost of Deploying and Operating Computer Infrastructure
K-12 Public Schools - "Classroom Model"

Initial Deployment Costs - $47 Billion

51%

13%

4%

4%

14%

14%

- ■ 4% - Connection to School
- ▦ 13% - Connections and Linkages within School
- ■ 51% - Hardware, Software and Retrofitting
- ▢ 14% - Professional Development and Support
- ■ 14% - Content and Subscription Charges
- ■ 4% - Systems Operation and Maintenance

Annual Operating Costs - $14 Billion

34%

12%

7%

8%

19%

20%

- ■ 7% - Connection to School
- ▦ 12% - Connections and Linkages within School
- ■ 34% - Hardware, Software and Retrofitting
- ▢ 19% - Professional Development and Support
- ■ 20% - Content and Subscription Charges
- ■ 8% - Systems Operation and Maintenance

All classrooms have 1 computer per 5 students; ethernet LAN connecting all classrooms; T-1 connection. Deployment accomplished over 10 years.